CROSSLINKING OF FLUORESCENT* PCS-101 AND OF POLYLYSINE IN AN EYE-DROP FORMULATION TO RABBIT CORNEA INVIVO

*FLUORESCENCE INTENSITY IN THE ORIGINAL SOLUTION IS 175 FOLD LOWER IN PCS-101 SOLUTION THAN IN POLYLYSINE SOLUTION

TIME AFTER LAST APPLICATION 1hr 36hrs

POLYLYSINE

FLUORESCENCE

Fig. 1A

BRIGHTFIELD

Fig. 1B

PCS-101

FLUORESCENCE

Fig. 1C

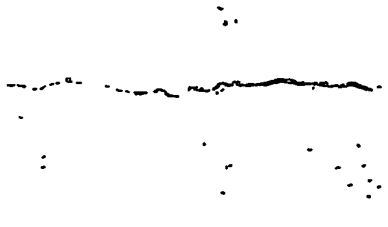
BRIGHTFIELD

Fig. 1D

CONTROL: VEHICLE

FLUORESCENCE

Fig. 1E



BRIGHTFIELD

Fig. 1F

TIME COURSE OF 0.34 µg/µl HA-POLYLYSINE-FITC CONJUGATE
BINDING TO HUMAN FINGER IN VIVO
WITH SAMPLE APPLIED BY RUBBING

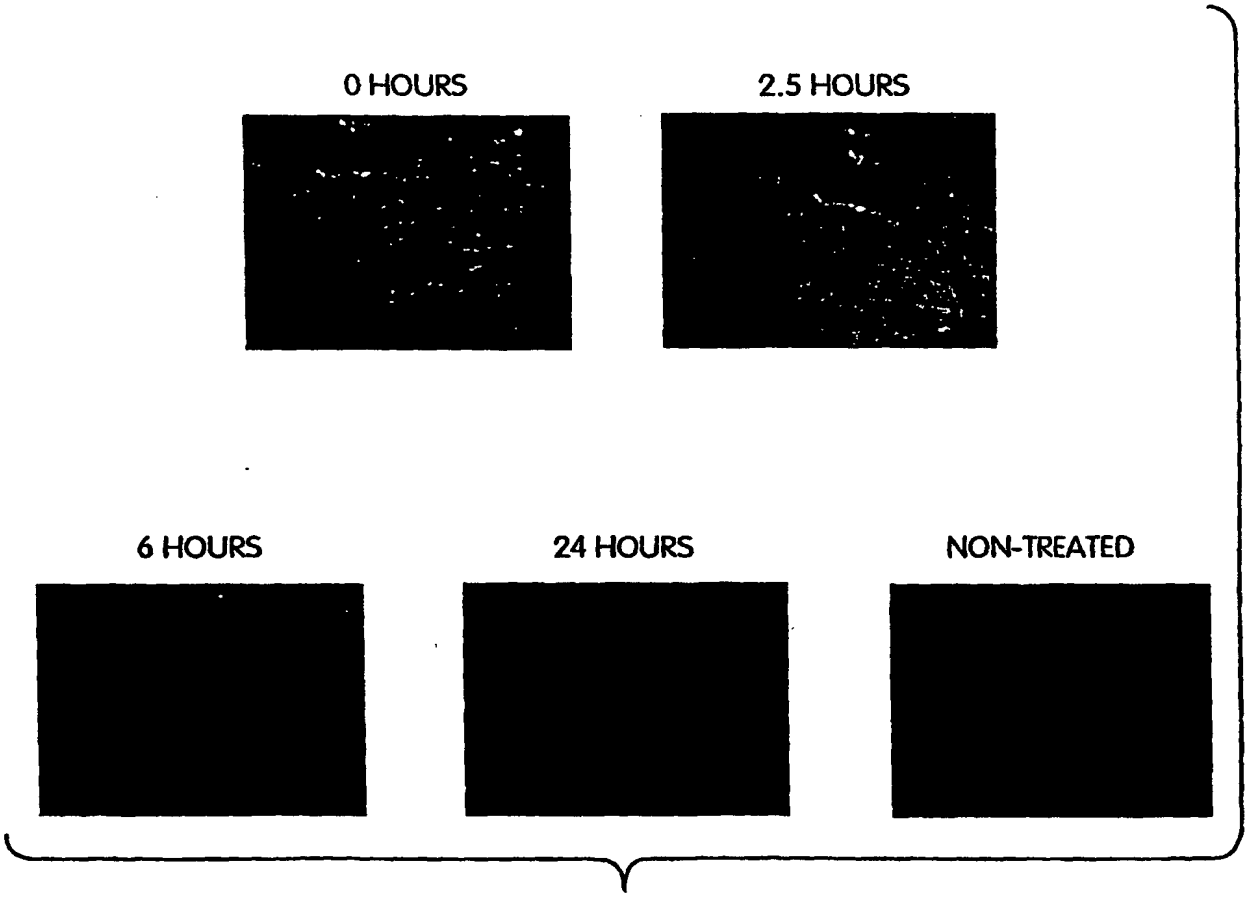


Fig. 2

UPTAKE AFTER REPEATED APPLICATIONS OF PCS-101 TO RABBIT CORNEA WITHOUT ADDED TRANSGLUTAMINASE

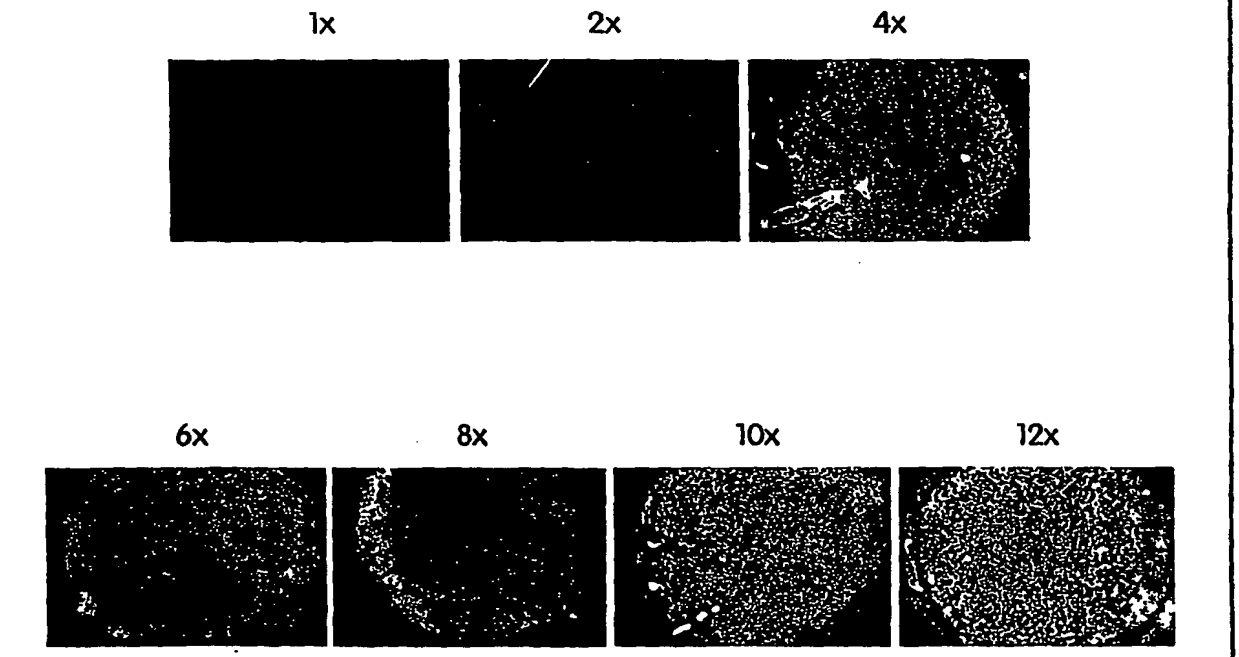


Fig. 3

UPTAKE AFTER REPEATED APPLICATIONS OF PCS-101 TO RABBIT CORNEA
WITHOUT ADDED TRANSGLUTAMINASE

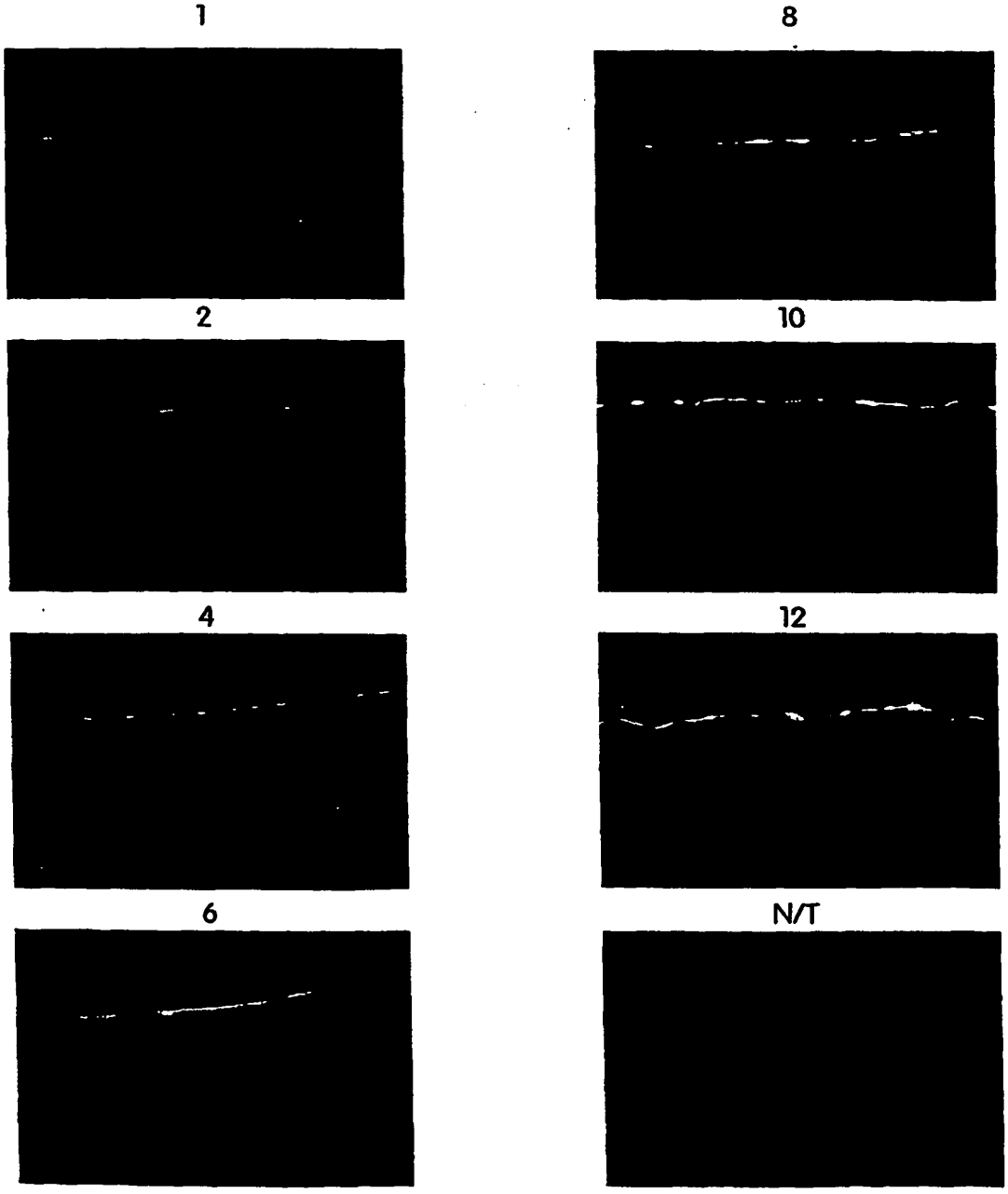


Fig. 4

CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG PALATE EPITHELIUM WITHOUT ADDED TRANSGLUTAMINASE AND ITS INHIBITION BY EDTA

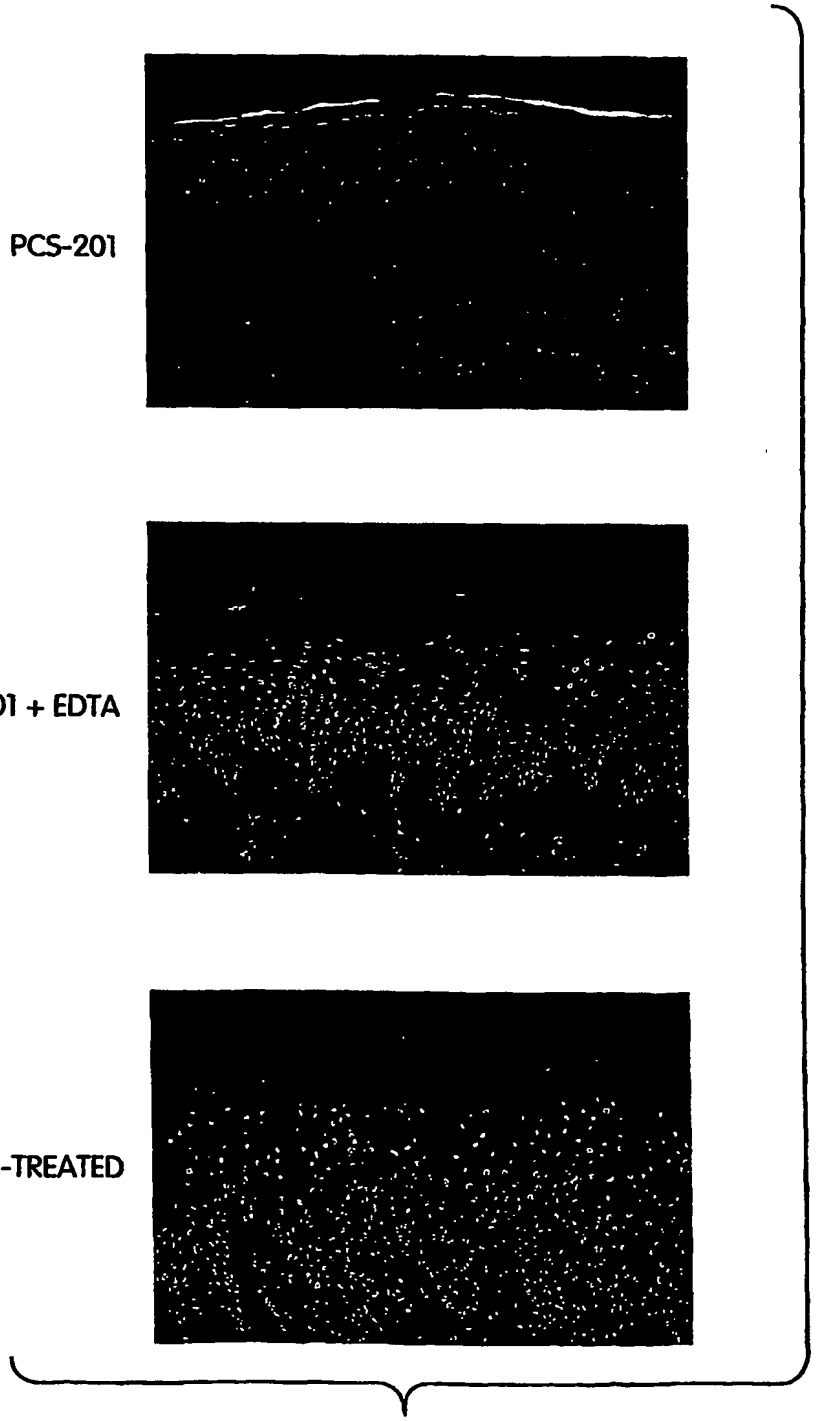


Fig. 5

CROSSLINKING OF FLUORESCENT PCS-201 TO THE LOWER SURFACE OF PIG TONGUE EPITHELIUM WITHOUT ADDED TRANSGLUTAMINASE AND ITS INHIBITION BY EDTA

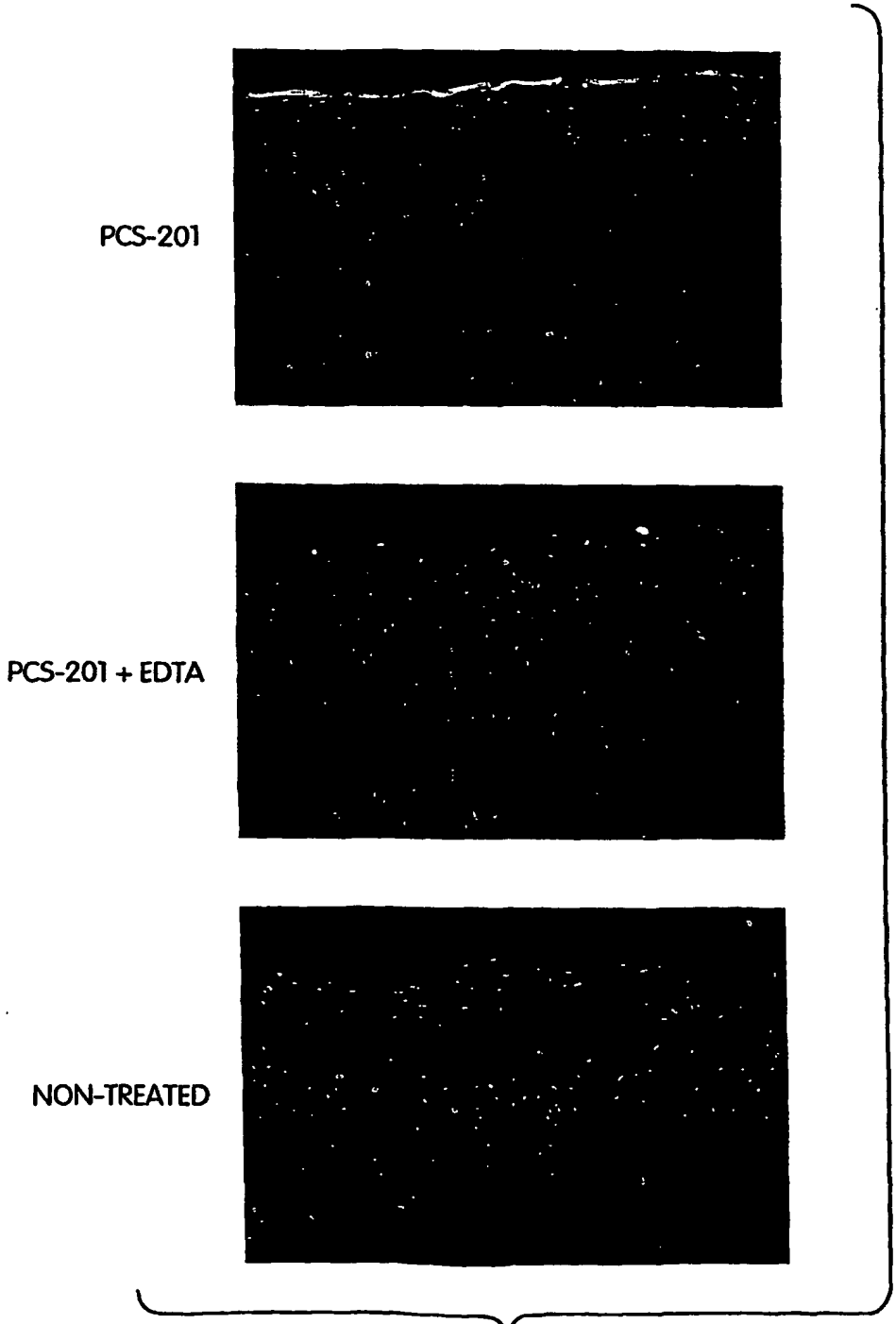


Fig. 6

CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG GUM EPITHELIUM WITHOUT ADDED TRANSGLUTAMINASE AND ITS INHIBITION BY EDTA

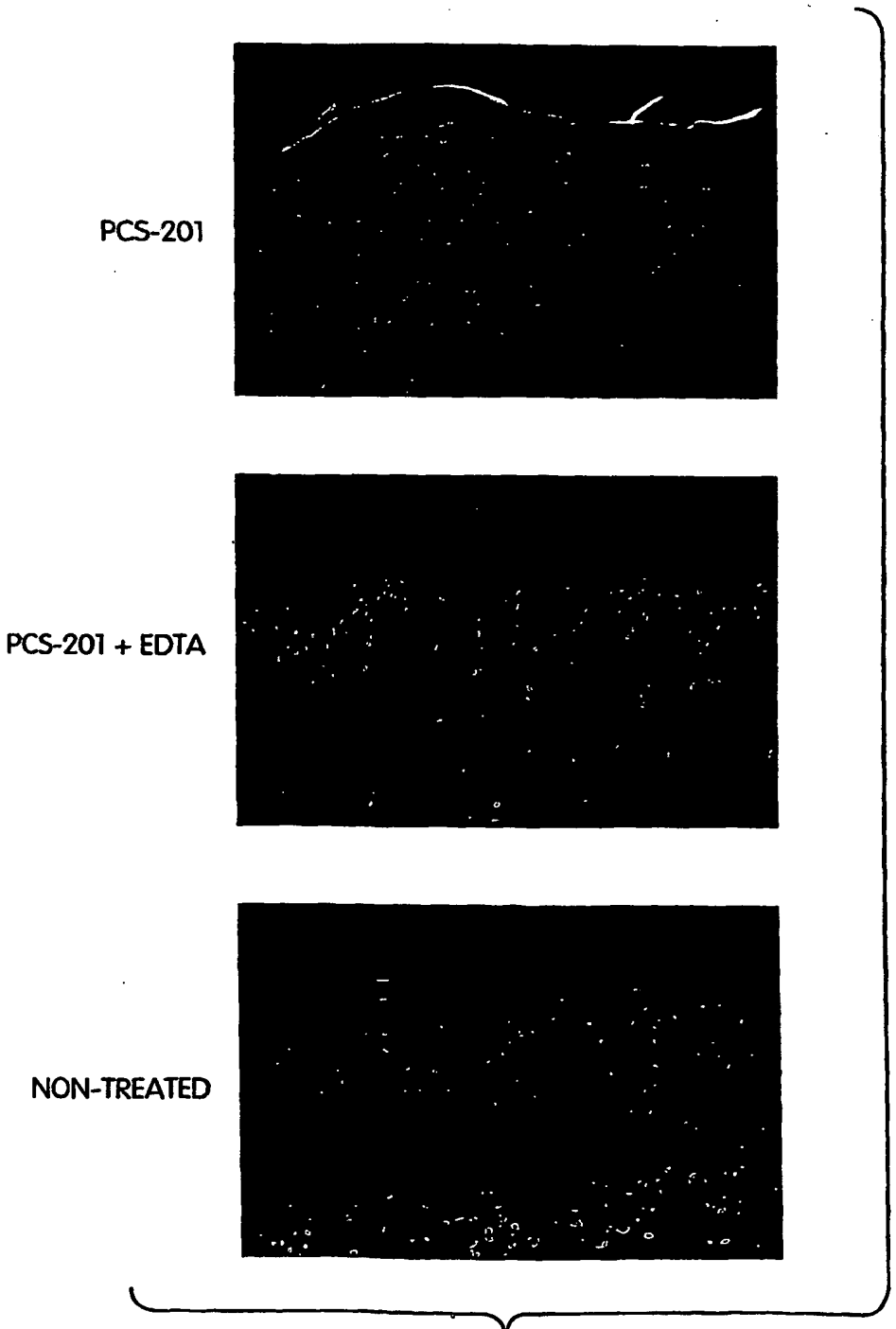


Fig. 7

CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG TONGUE AND GUM EPITHELIA WITHIN 30 SECONDS OF APPLICATION WITHOUT ADDED TRANSGLUTAMINASE

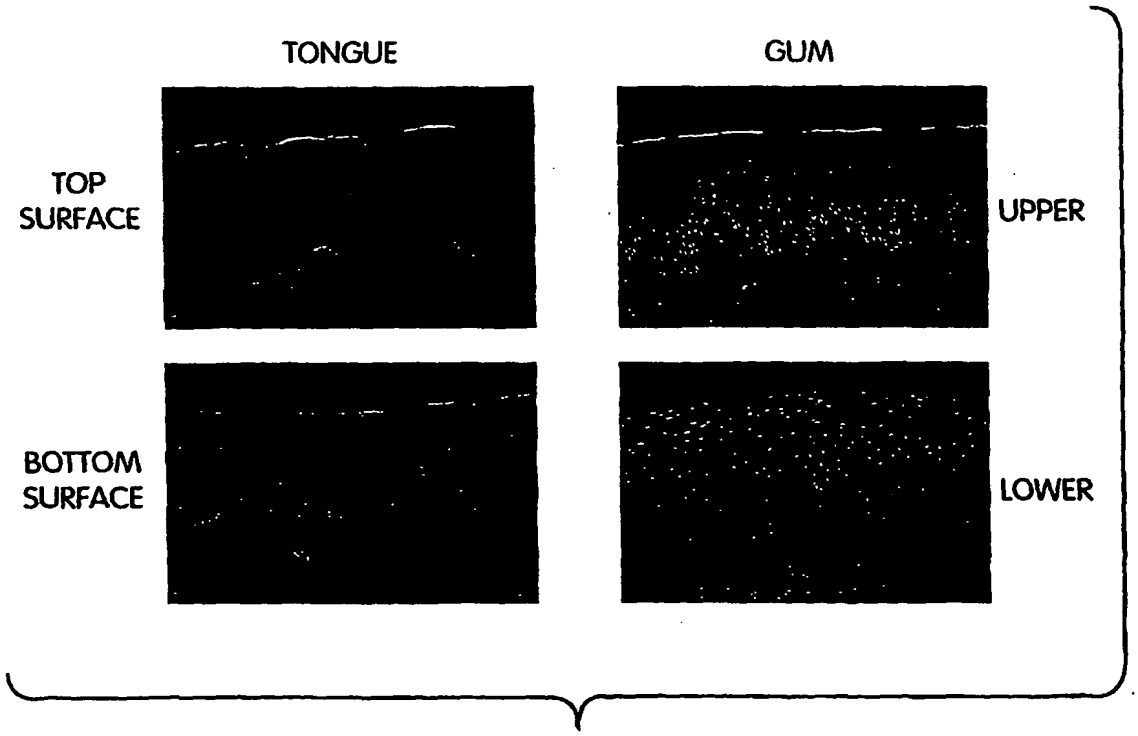


Fig. 8

CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG PALATE, GUM AND TONGUE EPITHELIA WITHIN 30 SECONDS OF APPLICATION WITHOUT ADDED TRANSGLUTAMINASE

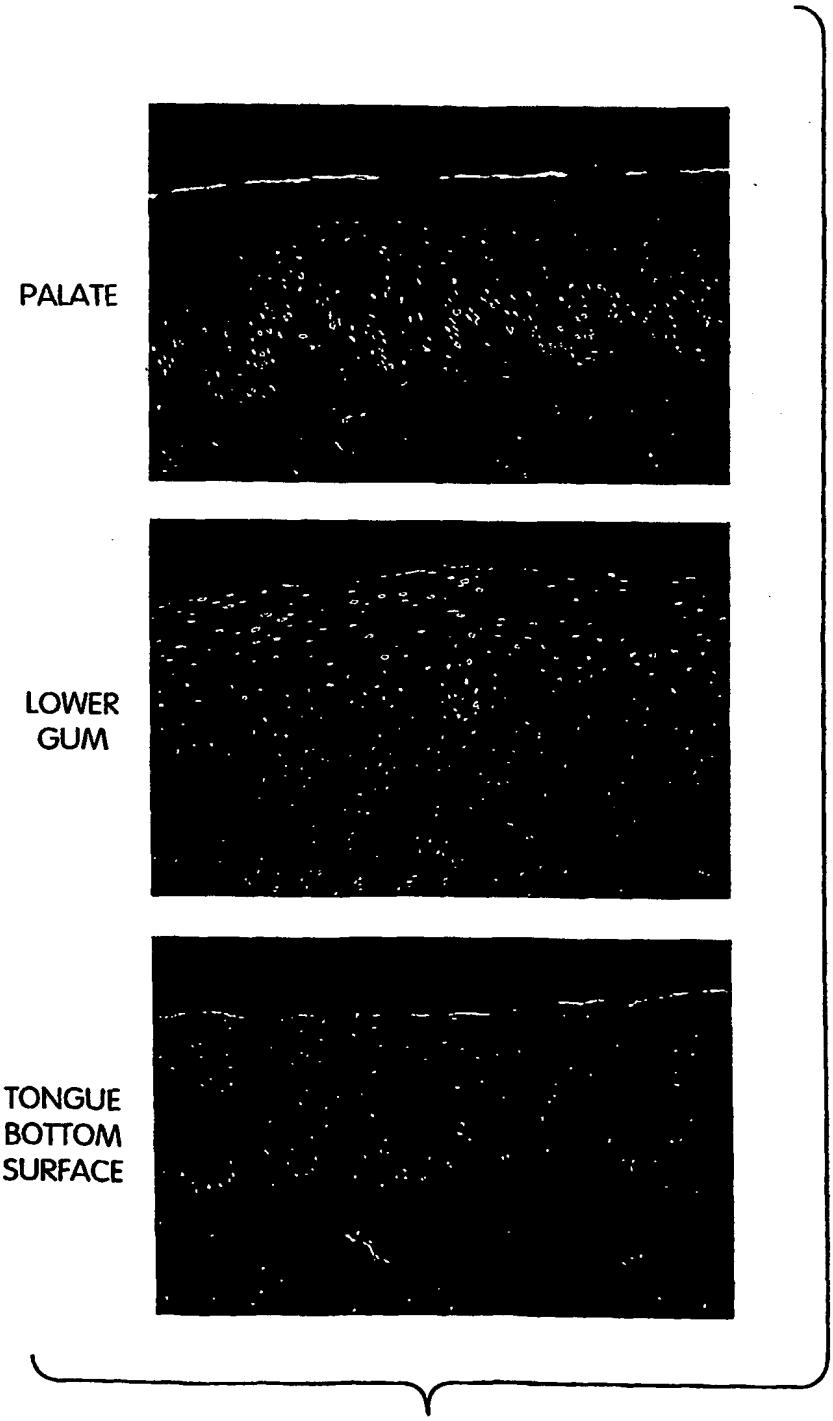


Fig. 9

CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG PALATE EPITHELIUM WITHIN 30 SECONDS OF APPLICATION WITHOUT ADDED TRANSGLUTAMINASE

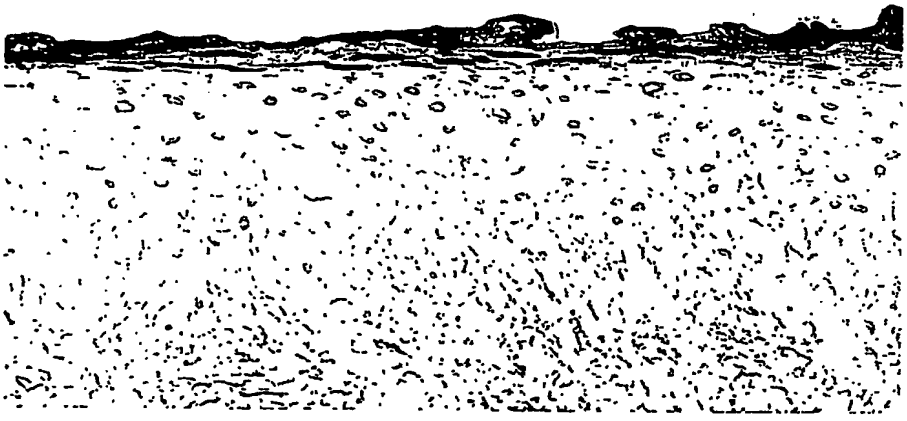


Fig. 10

CROSSLINKING OF FLUORESCENT* PCS-201 AND OF POLYLYSINE TO THE INNER LINING OF PIG AORTAS WITHOUT ADDED TRANSGLUTAMINASE

* FLUORESCENCE INTENSITY IN THE ORIGINAL SOLUTION IS 17 FOLD LOWER IN THE PCS-201 SOLUTION THAN IN POLYLYSINE SOLUTION

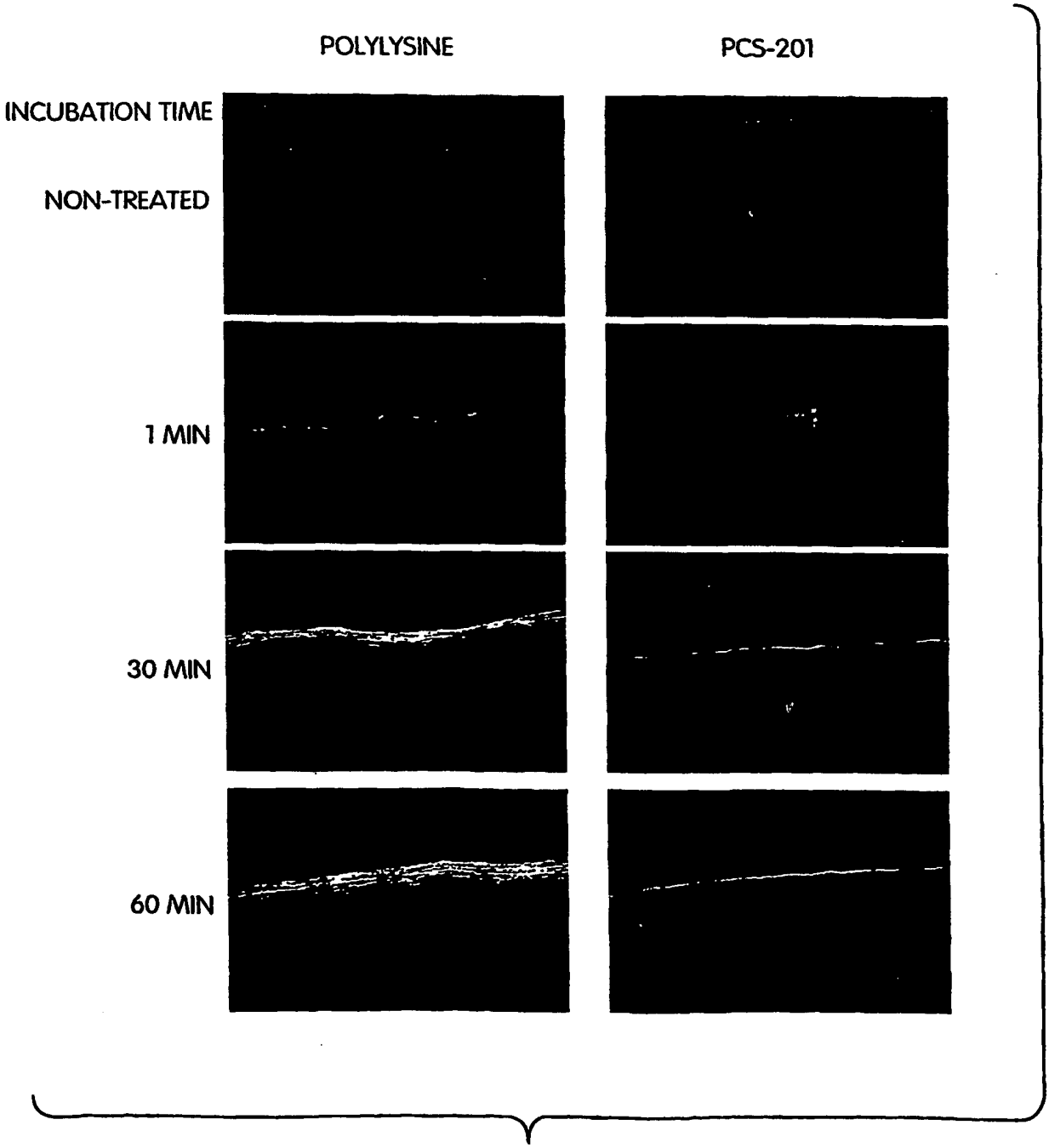


Fig. 11

EFFECT OF NaCl CONCENTRATION ON COUPLING OF HYALURONIC ACID-POLYLYSINE-FITC TO THE CORNIFIED LAYER OF RABBIT CORNEA WITHOUT ADDED TRANSGLUTAMINASE

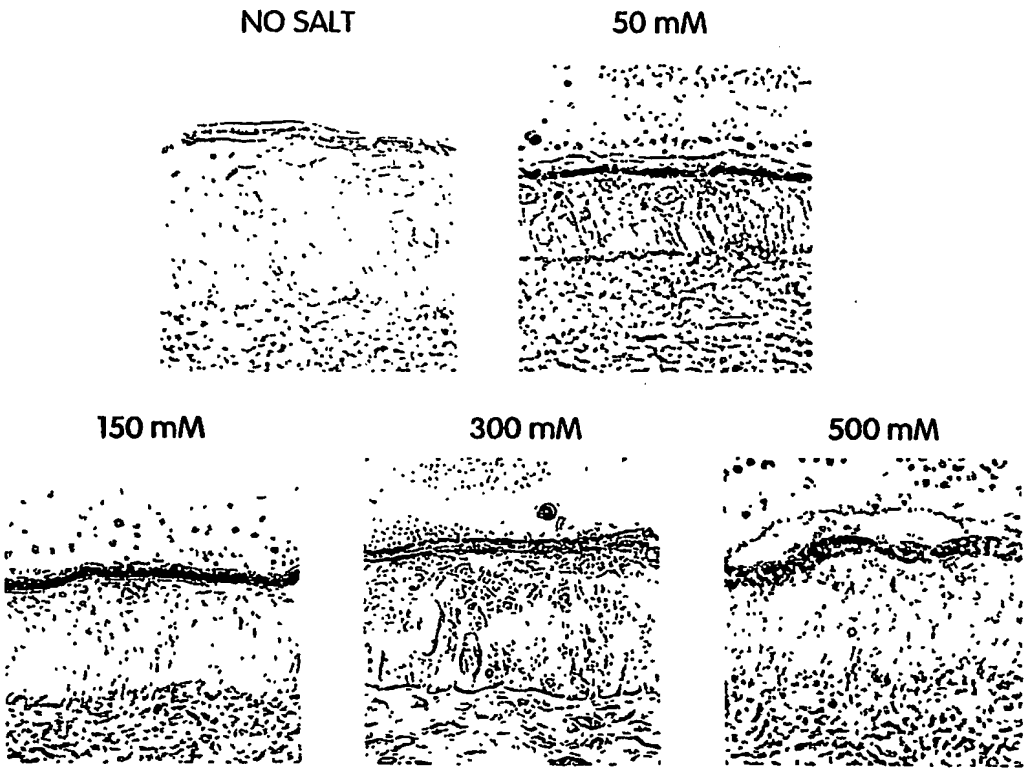


Fig. 12

CROSSLINKING OF PCS-101 (HA-FITC CONJUGATED TO PLL-TRITC)
TO RABBIT CORNEA WITHOUT ADDED TRANSGLUTAMINASE
AND COMPAIRED TO HA-FITC AND PLL-TRITC

UPTAKE AFTER SIX REPEATED APPLICATIONS
INCUBATION TIME OF EACH APPLICATION WAS 1 MINUTE

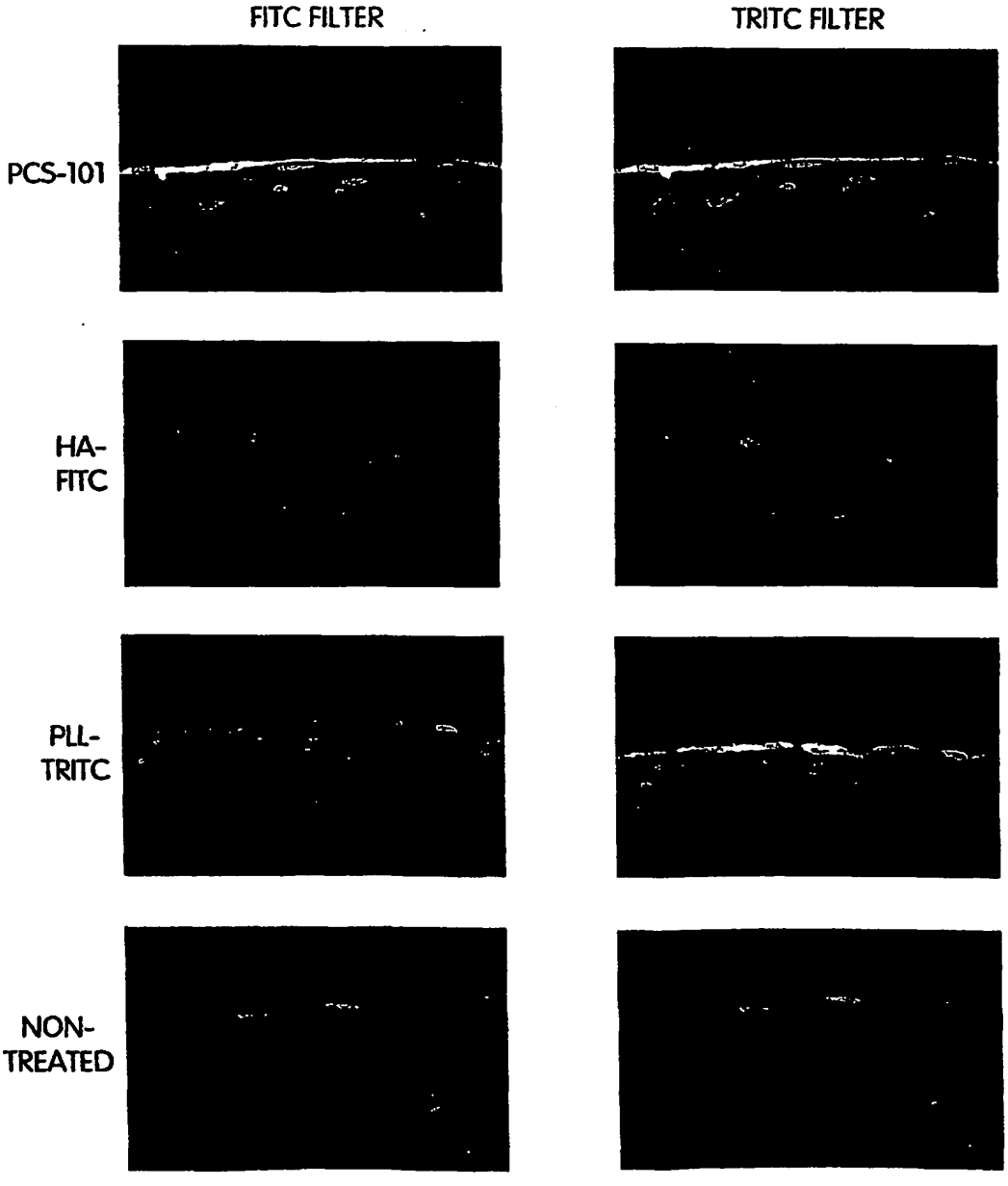


Fig. 13

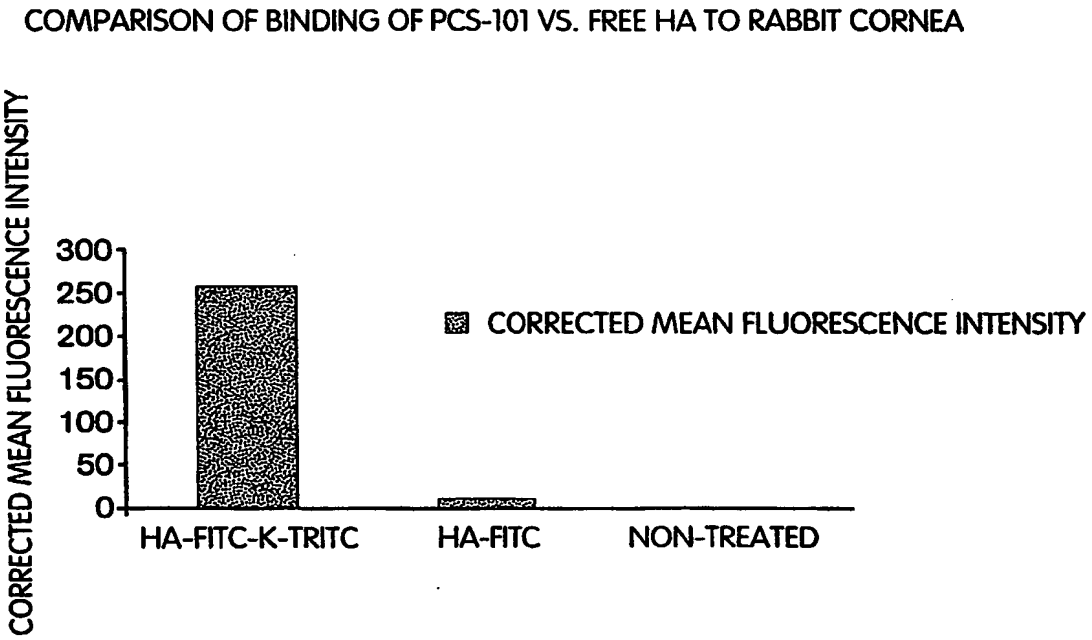

COMPARISON OF BINDING OF PCS-101 VS. FREE HA TO RABBIT CORNEA
CORRECTED MEAN FLUORESCENCE INTENSITY
300
250
200
150
100
50
0
HA-FITC-K-TRITC
HA-FITC
NON-TREATED
CORRECTED MEAN FLUORESCENCE INTENSITY

Fig. 14